

## SUMMARY OF SUBCOMMITTEE MEETING

**DATE:** March 31, 2003 (*revised April 18, 2003*)

**TO:** Ross Dunfee, Steering Committee Chairman  
Karen Dinicola, Department of Ecology

**COPY:** Stormwater Manual Subcommittee Members and Consultant Team

**FROM:** Dave Moss, Tt/KCM

**SUBJECT:** **Summary of Stormwater Manual Subcommittee Meeting**  
**Moses Lake Conference Center**  
**March 13, 2003 8:30 am – 4:00 pm**

**PROJECT:** EASTERN WASHINGTON STORMWATER MANAGEMENT  
Stormwater Management Technical Manual *and*  
Model Municipal NPDES Phase II Stormwater Program

### Subcommittee Meeting Attendees:

Ross Dunfee – Benton County	Karen Dinicola – Ecology
Steve Worley – Spokane County	Mike Hepp – Ecology
Michelle Brich – HBA of Tri-Cities	Dave Moss – TetraTech/KCM
Gary Nelson – Spokane County	Arthur Lee – TetraTech/KCM
John Hohman – Spokane County	Mike Barber – WSU
Colleen Little – Spokane County	Tony Righellis – HHR
Paula Cox – Chelan County	Mike Brunfelt – Inter-Fluve
Don McGahuey – City of Wenatchee	Heather Ostenson – RH2
Steve King – City of Wenatchee	Jocelyne Gray – JUB Engineers
Sandra Levey – Grant County PUD	Brad Bogus – Kennedy-Jenks / Pasco
Ryan Lyyski – City of Ellensburg	Lenny Kong – Ingenious Systems
Lloyd Brewer – City of Spokane	Gary Beeman – WSDOT
Lars Hendron – City of Spokane	Greg Lahti – WSDOT
Steve Hansen – City of Spokane	John Heinley – WSDOT
Don Gatchalian – Yakima County	

### PURPOSE OF MEETING:

This meeting was held to gather the Manual subcommittee and at-large members to continue review of public comments and prepare responses for updating the project documents.

**AGENDA FOR THIS MEETING:**

1. Introductions; Sign-in; Review/Confirm Agenda for Today's Meeting
2. Review subcommittee meeting summary for February 13th
3. Chapter 6 – Review comments and draft responses
4. Hydrologic Issues – Tony Righellis (HHR) – Presentation and Discussion
5. Working lunch
6. Flow Control Issues – Mike Brunfelt (Inter-Fluve) – Presentation and Discussion
7. Chapter 6 – Review comments and draft responses (cont'd)
8. Next meeting: date, time and agenda

**BRIEF SUMMARY OF PROCEEDINGS:**

1. Steve Worley opened the meeting, and facilitated introductions; sign-in; confirmed agenda as proposed.
2. Steve Worley reviewed the summary of the ~~March~~February 13, 2003 meeting, and asked if there were any comments or corrections. None were proposed.
3. Steve Worley then facilitated the process of going through comments and draft responses for the selected sections of the Manual - Chapter 6: Water Quality Facility Design – Dave Moss, Arthur Lee & Mike Barber. Prior to the meeting, a copy of all the comments and proposed draft responses were sent to the subcommittee members. In today's meeting, the Manual subcommittee then reviewed each comment and each response and either agreed or edited the response. A few responses were deferred to later meetings when related discussion was scheduled to take place. The details of all the discussion are captured in the updated version of each section, distributed separately. The draft responses were formatted as follows:

***COMMENT NOTED:** means the comment has been taken into consideration but generally no change to the document is suggested at this time*

***RESPONSE:** the change suggested in the comment is either accepted or rejected as described*

***SUGGESTED RESPONSE:** followed by a draft response to be considered by the subcommittee*

***SUBCOMMITTEE TO DISCUSS:** the comment should be addressed, but a suggested change may or may not be proposed yet – requires discussion by the subcommittee [which was done in the meeting].*

Again, the detailed discussion is not summarize herewith, but rather in the Comments/Responses document to be sent separately to each subcommittee member (and posted on the FTP site).

4. To supplement the discussion on Chapter 6, Karen Dinicola handed out a revised draft of Section 6.6 Subsurface Infiltration (Underground Injection Facilities). Also distributed was a draft of an expanded section for "Cold Weather Considerations" prepared by Mike Barber. These would continue to be updated as needed, based upon further review and feedback.
5. At mid-morning on the agenda, Tony Righellis (HHR of Las Vegas, NV) began his presentation on design storm hydrology and modeling methodologies. This is a special task to assist with updating Chapter 4 of the manual. [Tony's powerpoint presentation is ~~included in~~ a separate document.] To summarize Tony's analysis would involve listing most everything in his presentation, so is not repeated here. Briefly, however, Tony suggested that the long duration storm might be represented by the SCS Type IA hyetograph, with correction for antecedent moisture under certain conditions. The 24-hour duration seemed appropriate for Regions 2, 3 and 4, but a multiplier might be appropriate for Region 1 where rainfall is typically larger. Tony received feedback from the subcommittee, and will prepare an updated presentation, and a draft white paper, for the April 17th meeting. Tony will also assist Dave Moss with responses to comments for Chapter 4.

6. Just after lunch, Mike Brunfelt (Inter-Fluve of Hood River, OR) began his presentation on the biological (flow control) topic. A draft white paper and his powerpoint presentation entitled “Scientific Basis for Requiring Flow Control to Protect Eastern Washington Streams” were distributed and presented. [Mike’s powerpoint presentation is ~~included in~~ a separate document.] To summarize Mike’s analysis would involve listing most everything in his presentation, so is not repeated here. Briefly, however, Mike suggested flow control was appropriate for lower order (generally smaller) streams to protect geomorphology and biodiversity. Though little or no literature was available specifically for eastern Washington and similar climates, significant research shows there is a need to control flow in developing urban areas to maintain the physical stability and ecological integrity of stream channels. Mike reviewed three optional flow control standards and suggested the “Channel Threshold Discharge” method be used, since it seems reasonably applicable and can be implemented easily. Controlling to 50% of the 2-year discharge is recommended. Some participants agreed with Mike’s recommendations and others felt the research was not strong enough to warrant flow control. Karen Dinicola indicated she would take the information and comments provided, rewrite Core Element #6 to hopefully accommodate the variety of feedback, and redistribute for review.
7. Chapter 6 comments and responses were reviewed for about an hour before lunch, and for more than an hour near the end of the meeting, but were not completed. Completion of review and discussion for Chapter 6 was scheduled for the April 17th meeting.
8. *[Added]* During the meeting, Karen noted that the municipal stormwater legislation proposed in both houses of the Legislature: SHB 1689 and SSB 5645, are substitutes for the original bills developed by Dave Williams and Paul Parker of Assn of WA Cities and Counties. Ecology supports both bills with some concerns. Both bills recognize and endorse this group as the appropriate Eastern Washington Stormwater Advisory Group. The House bill lacks definition around the advisory process for Western Washington. Both bills contain an appropriate list of issues for the advisory groups to address; both need some clarification of roles and timelines (permits will not be completed during the same 9 month period) and how they intend to address Phase I. The Senate bill includes a definition of MEP which does not meet the intent of the federal rules that the goal of stormwater management is to protect water quality. Both bills are better than the original bills; interesting to note that business and environmental groups were joined in opposition to those bills.
9. The next meeting’s agenda (as listed below) was reviewed. Meeting adjourned at 4pm.

### PRELIMINARY AGENDA FOR NEXT MEETING:

The **next meeting** will be at the Moses Lake Conference Center on **April 17, 2003**, from **8:30am to 4pm**. The agenda will include:

- Review of Subcommittee agenda and summary from March 13, 2003 meeting.
- Hydrologic Issues – Tony Righellis (HHR) – Presentation, White Paper, and Discussion
- Review/discuss comments and draft responses on the following sections:
  - > Snowmelt / Design Storms – portion of Core Elements #5 & #6 – Chapter 2 <
  - > Core Element #5 – Chapter 2 <
  - > Core Element #6 – Chapter 2 <
  - > Chapter 4 – Hydrologic Analysis and Design <
  - > Chapter 6 – Water Quality Facility Design (cont’d from previous meeting) <
- Other discussion pertinent to making Manual ready for a second public review.

*The following notes are from the flip charts (created at the meeting) from participant comments:*

No flip charts were created.